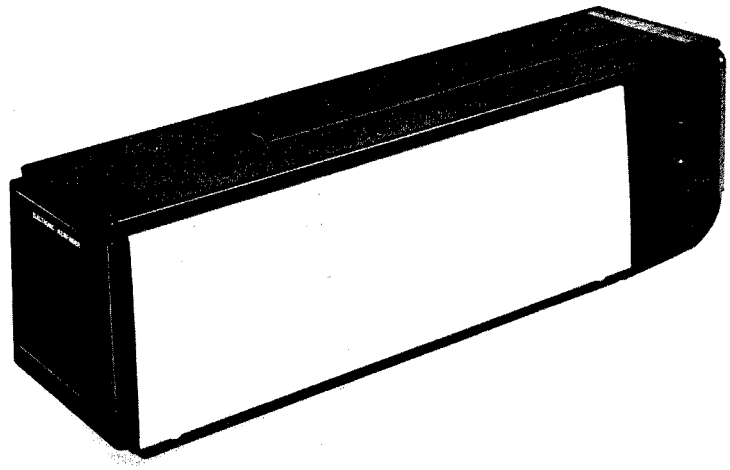
AVF-3250A
AVF-3250ACE

ELECTRONIC VIEWFINDER

For Sony AVC-3250/-3260 video cameras
For Sony AVC-3250CE video camera



SPECIFICATIONS

	AVF-3250A	AVF-3250ACE
Scanning system	525 lines per frame, 30 frames per sec. 2 : 1 interlace (when connected to a 2 : 1 interlaced camera)	625 lines per frame, 25 frames per sec. 2 : 1 interlace (when connected to a 2 : 1 interlaced camera)
Vertical frequency	59.94 Hz	50 Hz
Horizontal frequency	15.734 kHz	15.625 kHz
Picture tube	4 inches, 50-degree deflection angle	
Video input	2.0 V(p-p), sync negative, unbalanced, 9-pin male connector	
Power requirements	13 V AC ~, 50 – 60 Hz (supplied from the video camera)	
Power consumption	14 W	
Operating temperature	0°C to 40°C (32°F to 104°F)	
Dimensions	Approx. 110 x 108 x 341 mm ($4\frac{3}{8}$ x $4\frac{1}{4}$ x $13\frac{3}{8}$ inches) (w x h x d)	
Weight	Approx. 1.9 kg (4 lb 3 oz)	

SONY®
SERVICE MANUAL

SAFETY RELATED COMPONENT WARNING

Components identified by shading on the schematic diagrams and parts list are critical to safe operation. Replace these components with SONY parts whose part numbers appear as shown in this manual or in supplements published by SONY.

X-RAY RADIATION WARNING

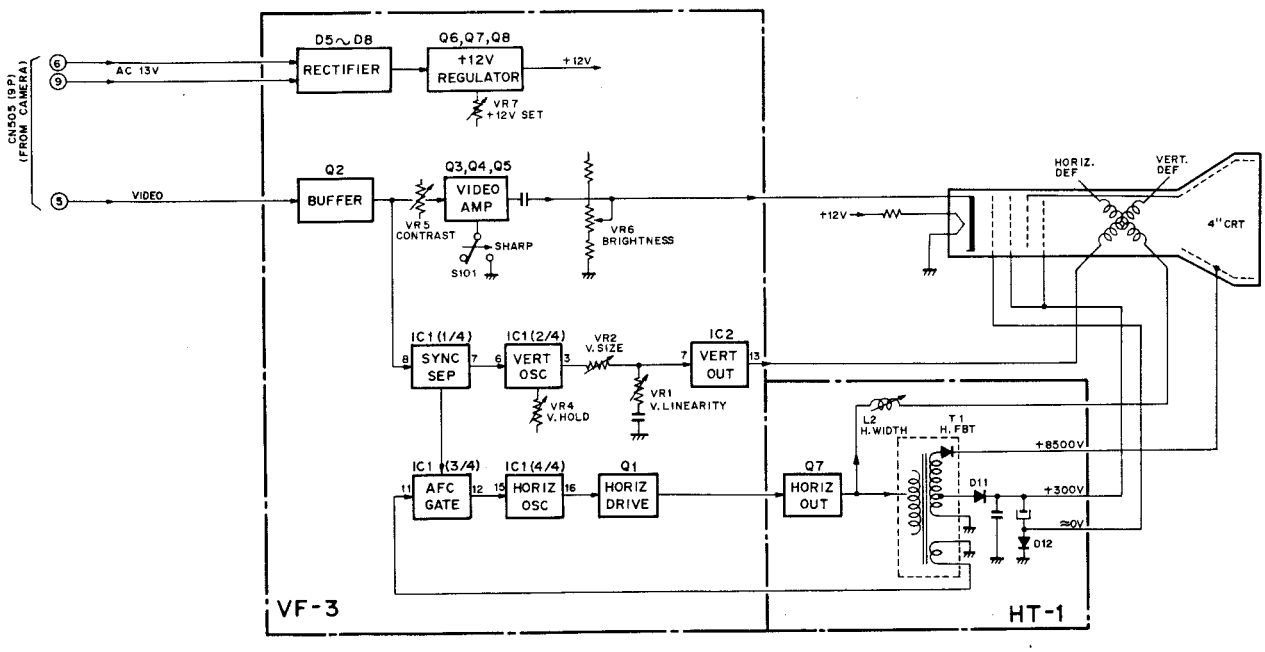
Be sure that parts replacement in the high voltage block and adjustments made to the high voltage circuits are carried out precisely in accordance with the procedures given in this manual.

LEAKAGE CURRENT MEASUREMENT WARNING

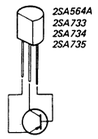
Before returning the set to the customer, confirm the leakage current is less than 0.1 mA;

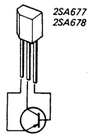
1. Between all exposed metal parts and any exposed metal parts having a return to chassis, and
2. Between exposed metal parts and earth ground.

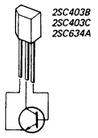
BLOCK DIAGRAM

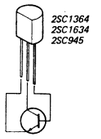


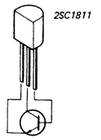
PRINTED WIRING BOARDS

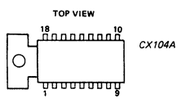


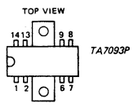


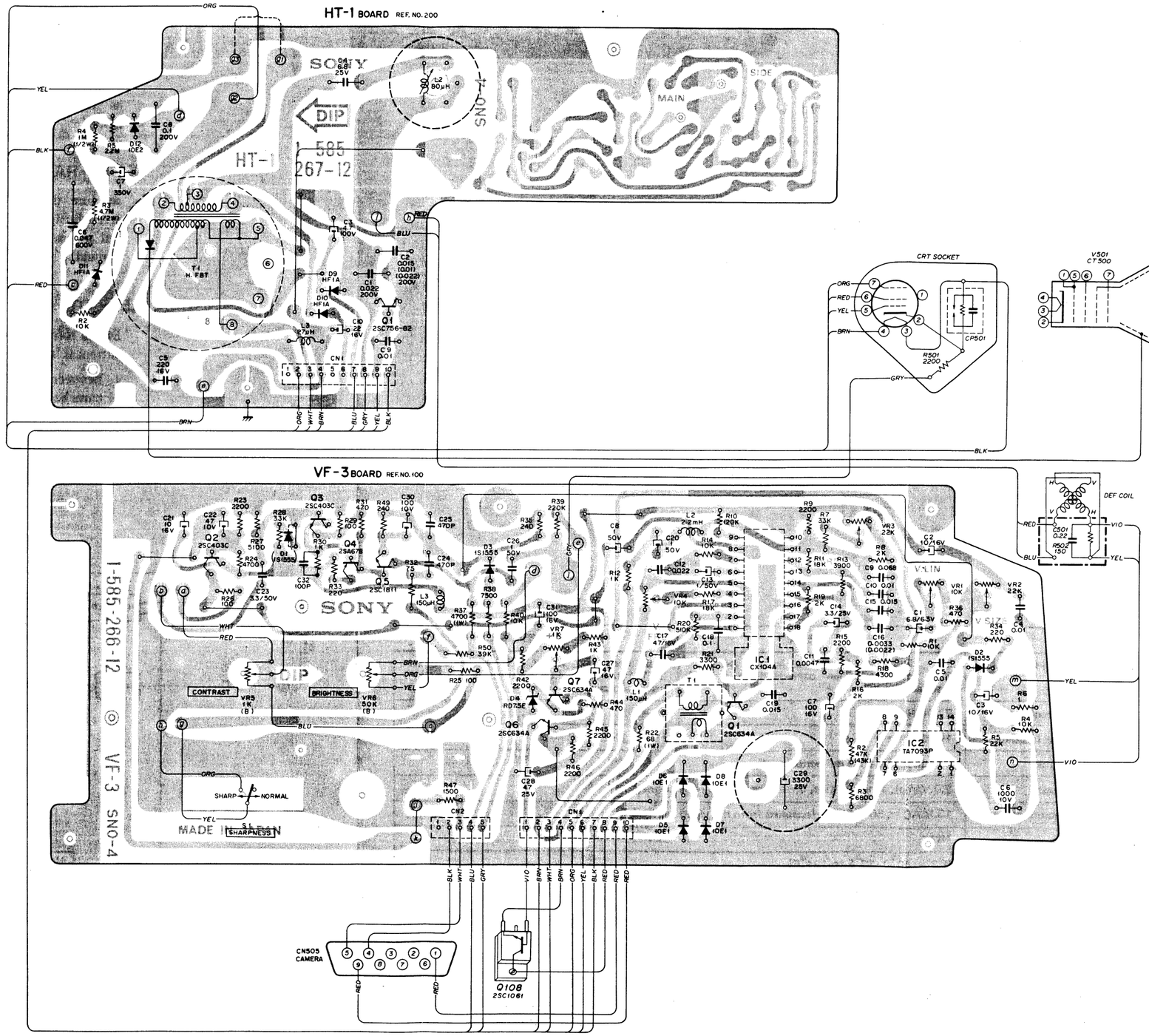




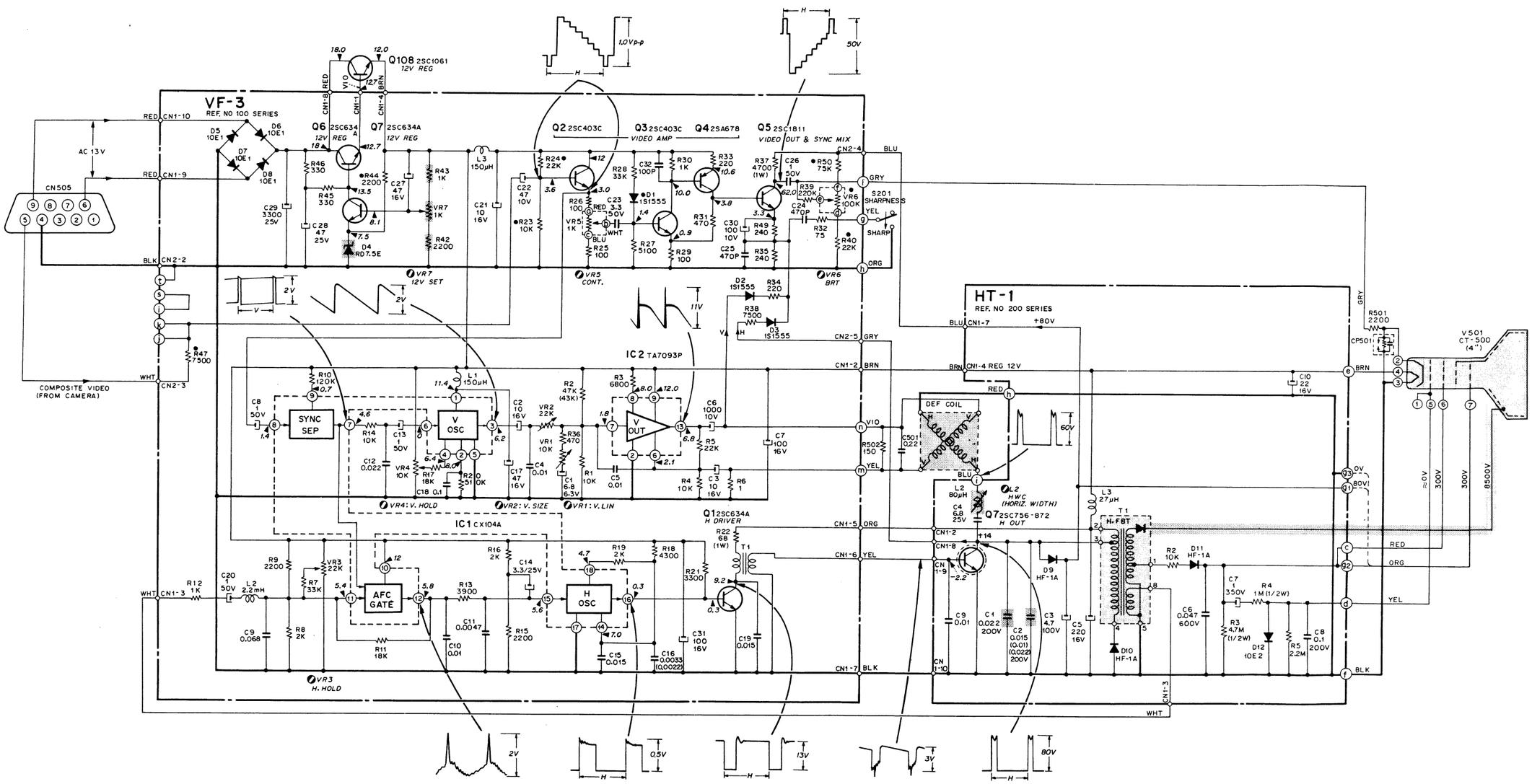








SCHEMATIC DIAGRAM



NOTE : 1. The CRT pin-7 is connected to either g1, g2 or g3 of the HT board for optimum picture focus.

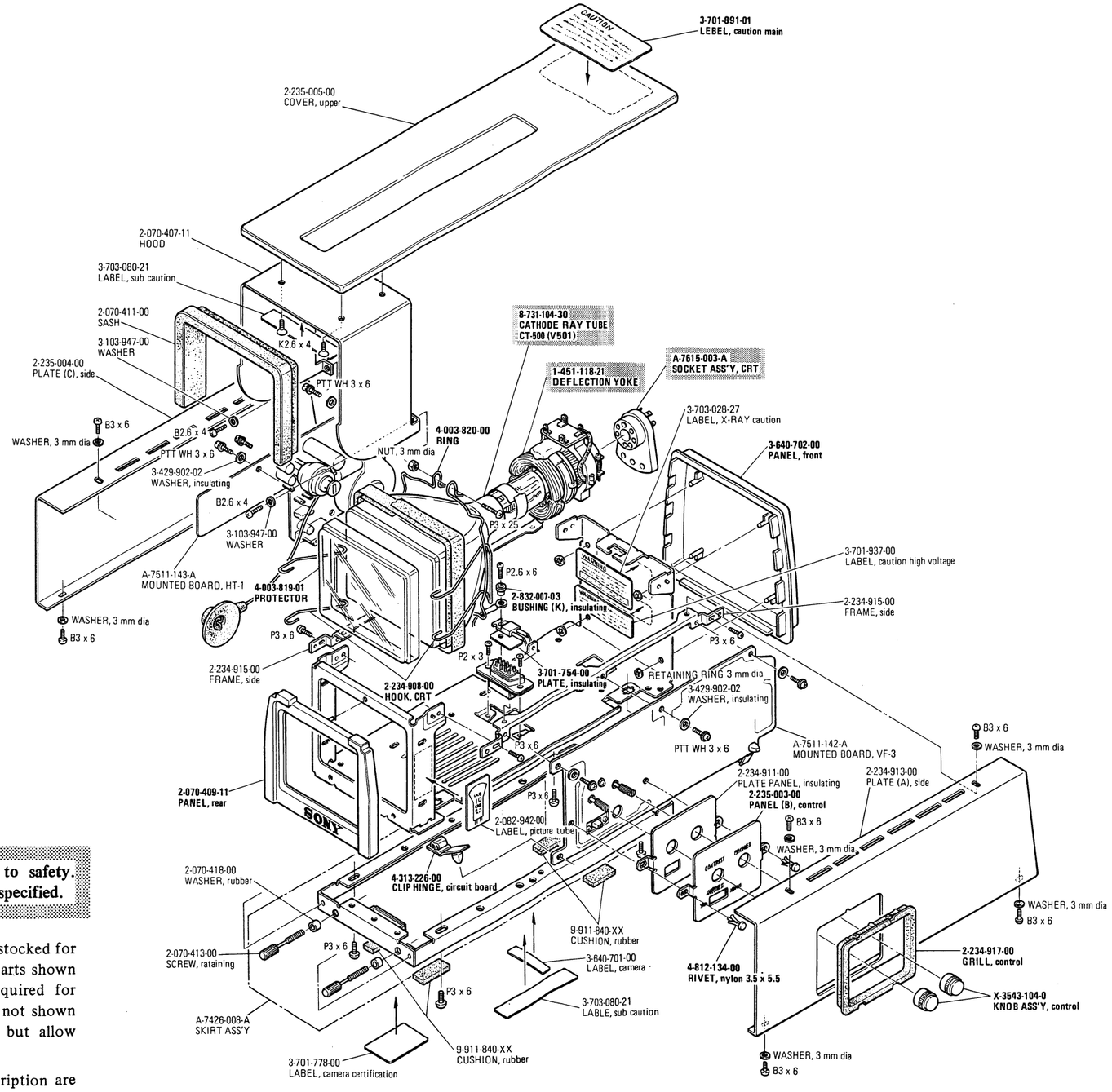
2. Components with • , value changed.

D1 : deleted and shorted.

R23 : 10K	→ 2200	R50 : 75K	→ 39K
R24 : 22K	→ 4700	R40 : 22K	→ 10K
R44 : 1K	→ 470	VR6 : 100K (A)	→ 50K(B)
R47 : 7500	→ 1500		

3. **The shaded components are critical to safety. Replace only with same components as specified.**

EXPLODED VIEWS



NOTE : 1. **The shaded components are critical to safety. Replace only with same components as specified.**

2. Printed in Bold-Face type are normally stocked for replacement purposes. The remaining parts shown in this manual are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.

3. Item no part number and/or no description are not stocked because they are seldom required for routine service.

ELECTRICAL PARTS LIST

(Parts list arranged in the order of parts reference number)

Mounted Boards

Ref. No.	Part No.	Description
	A-7511-142-A	VF-3 board
	A-7511-143-A	HT-1 board

Capacitors

Standard electrolytic capacitors (less than 1000 μF), mylar capacitors (less than 200 WV) and ceramic capacitors (less than 50 WV) are not listed.
All capacitors are in micro farads unless otherwise indicated.

VF-3 board

Ref. No.	Part No.	Description		
C101	**1-131-188-21**	**tantal**	**6.8**	**6.3 V**
C129	**1-123-246-11**	**elect**	**3300**	**25 V**

HT-1 board

Ref. No.	Part No.	Description		
C201	1-108-696-11	mylar,	0.022	200 V
C202	1-108-694-11	mylar,	0.015	200 V
C202	1-108-696-11	mylar,	0.022	200 V
C202	1-108-698-11	mylar,	0.033	200 V
C204	1-123-245-11	elect, non polar	6.8	25 V
C206	1-113-122-11	paper	0.047	500 V
C210	1-131-201-21	tantal	22	16 V

frame

Ref. No.	Part No.	Description
CP501	**1-519-063-XX**	**spark gap capacitor**

NOTE : 1. **The shaded components are critical to safety. Replace only with same components as specified.**

2. Printed in Bold-Face type are normally stocked for replacement purposes. The remaining parts shown in this manual are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.

Diodes

As to the type number and parts code number of all the semiconductors, those of replacement use are shown here.
Sometimes different types of semi conductor may be found in actual machine. Replacement use semiconductor and factory-installed semiconductor have complete interchangeability.

VF-3 board

Ref. No.	Part No.	Description
D102,103		**1S1555**
D104		**RD7.5E**
D105~108		**10E-2**

HT-1 board

Ref. No.	Part No.	Description
D209~211		**HF-1A**
D212		**10E-2**

IC's

VF-3 board

Ref. No.	Part No.	Description
IC101		**CX-104A**
IC102		**TA7093P**

Inductors

VF-3 board

Ref. No.	Part No.	Description	
L101	**1-407-171-XX**	**micro**	**150 μH**
L102	**1-407-198-XX**	**micro**	**2.2 mH**
L103	**1-407-171-XX**	**micro**	**150 μH**

HT-1 board

Ref. No.	Part No.	Description
L202	**1-459-184-00**	**coil, HOR width**
L203	**1-407-162-XX**	**micro 27 μH**

Transistors

As to the type number and parts code number of all the semiconductors, those of replacement use are shown here.
Sometimes different types of semi conductor may be found in actual machine. Replacement use semiconductor and factory-installed semiconductor have complete interchangeability.

VF-3 board

Ref. No.	Part No.	Description
Q101		**2SC634A**
Q102,103		**2SC403C**
Q104		**2SA678**
Q105		**2SC1811**
Q106,107		**2SC634A**

NOTE : 1. **The shaded components are critical to safety. Replace only with same components as specified.**

2. Printed in Bold-Face type are normally stocked for replacement purposes. The remaining parts shown in this manual are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.

Ref. No.	Part No.	Description
HT-1 board		
Q207	**8-727-587-28**	**2SC756-872**
Frame		
Q508		**2SC1061**

Resistors

Carbon resistors in ½ W, ¼ W and ±5% are omitted. All resistors are in ohms.

VF-3 board				
R122	**1-213-129-11**	**metal**	**68**	**1 W**
R137	**1-213-151-11**	**metal**	**4700**	**1 W**
R142	**1-242-681-11**	**carbon**	**2200**	
R143	**1-242-673-11**	**carbon**	**1 K**	
VR101	**1-224-252-XX**	**VAR**	**10 K**	**(B)**
VR102,103	**1-224-253-XX**	**VAR**	**22 K**	**(B)**
VR104	**1-224-252-XX**	**VAR**	**10 K**	**(B)**
VR105	**1-224-687-XX**	**VAR**	**1 K**	
VR106	**1-222-247-00**	**VAR**	**50 K**	
VR107	**1-224-249-XX**	**VAR**	**1 K**	

NOTE : 1. **The shaded components are critical to safety. Replace only with same components as specified.**

Ref. No.	Part No.	Description		
HT-1 board				
R203	**1-202-661-31**	**solid**	**4.7 M**	**½ W**
R204	**1-202-645-31**	**solid**	**1 M**	**½ W**

Switch

SW101	**1-516-779-XX**	**slide**

Transformers

T101	**1-435-009-00**	**HBT**
T201	**1-439-197-00**	**HOR. fly-back**

2. Printed in Bold-Face type are normally stocked for replacement purposes. The remaining parts shown in this manual are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.

Ref. No.	Part No.	Description
CRT		
V501	**8-731-104-30**	**CT-500**
Miscellaneous		
	A-7615-003-A	**Socket Ass'y, CRT**
	1-451-118-21	**Deflection Yoke**

NOTE : 1. **The shaded components are critical to safety. Replace only with same components as specified.**

2. Printed in Bold-Face type are normally stocked for replacement purposes. The remaining parts shown in this manual are not normally required for routine service work. Orders for parts not shown in Bold-Face type will be processed, but allow for additional delivery time.